## Centers of Excellence

# Department of Veterans Affairs Epilepsy Centers of Excellence

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By providing clinical care, outreach, research, education, innovation, a hub-and-spoke network of expert providers, the VA Epilepsy Centers of Excellence ensure high-quality care to veterans with epilepsy and seizure disorders.



Federal Practitioner's 30th anniversary celebration continues with the spotlight this month on the accomplishments of the Department of Veterans Affairs Epilepsy Centers of Excellence.

n 2008, the VA revolutionized services for veterans affected by epilepsy and other seizure disorders by creating the Epilepsy Centers of Excellence (ECoE). Sixteen sites were established across the country and linked to form 4 regional centers. The ECoE provide the most evidence-based epilepsy care to veterans throughout the U.S., offering stateof-the-art diagnostic and therapeutic services. The mission of the ECoE is to improve the health and well-being of veteran patients with epilepsy and other seizure disorders through the integration of clinical care, research, and education.

At the ECoE, the goals are (1) to establish a national system of care to all veterans with epilepsy; (2) to educate veterans and their caregivers about epilepsy and its treatment; (3) to provide education and training to health care professionals so that they can deliver the highest quality of care to veterans with epilepsy;

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(4) to use information from national VA and other databases to help policy makers in the VA Central Office make informed health policy decisions; (5) to conduct research to expand knowledge about epilepsy; (6) to implement an informatics backbone to meet the above objectives; and (7) to improve access to care for veterans with epilepsy in rural locations through outreach and telehealth services.

#### **CLINICAL CARE**

The ECoE offer a range of services in both outpatient and inpatient settings. The ECoE provide outpatient epilepsy clinics staffed by multidisciplinary teams, including neurologists who have subspecialty training in epilepsy, nurses, social workers, and clinical pharmacists. After evaluation by the epilepsy care team, veterans can be directed to the most advanced testing methods for the evaluation of epilepsy, including magnetic resonance imaging, electroencephalography (EEG), and positron emission tomography. For those patients that require more intensive testing, the ECoE house inpatient units for video-EEG monitoring to help characterize a patient's spells. The ECoE also offer surgery as an option for veterans with medically refractory epilepsy.

The ECoE are linked to VA polytrauma centers to facilitate the treatment of veterans with moderate and severe traumatic brain injury who are at the greatest risk for posttraumatic epilepsy. The sites are developing protocols to identify veterans with epilepsy and help expedite their referrals to get the specialized care they need in a timely manner.

#### **OUTREACH**

The ECoE have established a National VA Epilepsy Consortium to help disseminate up-to-date information on caring for veterans with epilepsy. Any VA staff participating in the care of veterans with epilepsy can join the consortium. Members include neurologists, epileptologists, primary care physicians, nurses, advance practice nurses, and EEG technologists. Through the consortium, members are able to network with other professionals taking care of patients with epilepsy, participate in monthly educational calls about hot topics in the epilepsy field, and collaborate in workgroups to improve care to veterans. Together with the ECoE, the National VA Epilepsy Consortium creates a hub-and-spoke model of care across the VA health care system, expanding and streamlining the referral network for specialized epilepsy treatment, advanced neurodiagnostics, and surgical evaluation. The consortium will ensure accessibility and continuity of specialized care for veterans, regardless of locality, broadening the impact of the ECoE network.

The ECoE are also pioneers in innovative ways to provide epilepsy care, especially to veterans living in rural areas. The San Francisco ECoE is currently piloting the Specialty Care Access Network—Extension for Community Healthcare Outcomes (SCAN-ECHO), a new service to provide consultation and clinical support from the epilepsy specialty team to other health care providers (HCPs) through video teleconferencing. The epilepsy SCAN-ECHO team and referring provider meet through video teleconferencing to discuss patient cases. The epilepsy team then delivers advice and a treatment plan to referring providers. SCAN-ECHO reduces the variation in epilepsy care and allows for patients to be treated locally instead of traveling long distances to see an epilepsy specialist.

Remote tele-EEG has also been established between the ECoE in Portland, Oregon, and the Boise VAMC in Idaho. Through this program, EEGs conducted in Boise can be reviewed online by epilepsy specialists in Portland. The epilepsy specialists then send their interpretation of the EEGs back to the referring providers to help in their diagnosis of epilepsy.

#### RESEARCH

The ECoE has developed collaborative multisite research programs funded by VA's Office of Research and Development, in epidemiology, basic science, and clinical research.

• Mary Jo Pugh, PhD, South Texas Veterans Health Care System, looks at health outcomes of the ECoE in the study "Restructuring Epilepsy Care: Organizational Dynamics and Quality: RECORD Quality"

- Christopher Ransom, MD, VA Puget Sound Health Care System, received a VA Career Development Award to study the trafficking of the gamma-aminobutyric neurotransmitter and its function in seizures and epilepsy
- Martin Salinsky, MD, Portland VAMC, is principle investigator of a collaborative multisite study in Portland, San Francisco, and Madison, looking at veterans with psychogenic nonepileptic seizures (PNES). Dr. Salinsky and colleagues recently published the article "Psychogenic Nonepileptic Seizures in US Veterans" in *Neurology*

The ECoE is finalizing a standardized medical record template, currently under an approval process, for the VA electronic medical record, the Computer Patient Record System, to be used nationally across the VA health care system. This will enable the ECoE to develop a database of veterans with epilepsy and collect standardized clinical quality measures.

#### **EDUCATION**

Each ECoE is affiliated with an accredited medical school that provides education and training in neurology, with many ECoE sites offering advanced physician graduate medical education fellowship training in the diagnosis and treatment of epilepsy through the Office of Academic Affiliation. The epilepsy centers provide accredited continuing medical education opportunities for HCPs, including physicians, nurses, and other allied health care staff throughout the VA health care system through a national audio conference series accredited by the Employee Education System. Recently the ECoE launched a video "Safety in the Epilepsy Monitoring Unit," available online through Talent Management System and as a DVD.

The ECoE also offer comprehensive education programs for veteran patients, their caregivers, and families, including a patient audio conference series, ongoing patient and caregiver support groups, printed hard copy education materials, and educational content on their website.

### **SUMMARY**

The ECoE facilitate the strengthening of clinical care, research, and education essential to improving the health and well-being of veterans with epilepsy and seizure disorders. The ECoE will continue to serve as a hub-and-spoke network of providers with expertise in epilepsy across the VA health care system. The ECoE ensure that veteran patients have access to quality care in rural areas through innovative outreach efforts. For more information about the ECoE, please visit http://www.epilepsy.va.gov.

#### **Author disclosures**

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